GPS/GSM Car Alarm & Tracking System J020G

USER MANUAL

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Brief Introduction

This GPS/GSM Car Alarm & Tracking System is not only the advanced car security product but also a precise GPS tracking system. It is a combination of Global Positioning System(GPS), Short Message System(SMS), Radio Frequency Identification Solution (RFID). It provides a very safe solution for protecting the vehicle.

This system is specially designed for individual user, user could supervise, control and locate the car by telephone without the third party. On the other hand, if the management center is set up, user could get much more stronger functions, such as tracking by map, easy-to-understand SMS message, Geo-fencing, etc.

Read it Firstly:

Please read this manual thoroughly before you use the device, please keep it for future reference.

Attention:

(1) Please keep the device away from the water, humidity place or high temperature.
(2) Please prepare a valid GSM SIM card in advance.

Warning:

We **strongly** suggest user let the professional car electrician to install the system.

How it work

(1) Prepare a valid GSM SIM card, insert it into the SIM card slot on the main unit.
(2) Install the system according to the wiring diagram (Shown as page).
(3) Setup the system according to the SMS instructions.(Shown as Page)
(4) Arm the system by transmitter or by telephone, then trigger the alarm (vibration, opening the door, or starting the engine), the system will send SMS to the alarm-received mobile immediately. This alert SMS includes the information of alarm type, latitude, longitude, Direction, Speed & GSM network's base station code.
(5) In case of hijack, press shortly the emergency button, the system will send SMS to the alarm-received mobile immediately.
(6) User could send out the command via SMS to monitor the voice around the vehicle, to stop the car, or to locate the car's position.

Functions & Features

(1) Automatically send SMS to your phone in case of theft.
(2) Monitor the voice around the car via telephone
(3) Cut off the car power/fuel supply by SMS, to stop the car
(4) Emergency button, send out SMS for help in case of hijack
(5) Lock/unlock the car door by the transmitter or by phone
(6) Central lock automation
(7) Inquire the car's location, speed & direction via SMS
(8) Two kinds of location information, user could locate the location by GPS. At those place where there is no GPS signal, user could also locate the car by GSM network;
(9) Track the car by SMS or by Google earth.
(10) Anti-tamper design with back up battery, stable and reliable.

System Setup

The management center's default password is: 666666 , the user default password is: 111111.

Please insert a normal GSM SIM card inside the unit. After finishing the installation according to the wiring diagram. Please setup the system as following:

(1) Send the 1st SMS to the Alarm.

CEN666666*10Mobile No.1*20Mobile No.2*30Mobile No.3*

For example, if the user wants to receive the alarm signal with his mobile 08034215677, and wants his family's number 08056667272 to receive the alarm signal too, he could send the following SMS to the alarm phone number:

CEN666666*1008034215677*2008056667272*30*

(If there is no phone number behind 20 or 30, let it blank.)

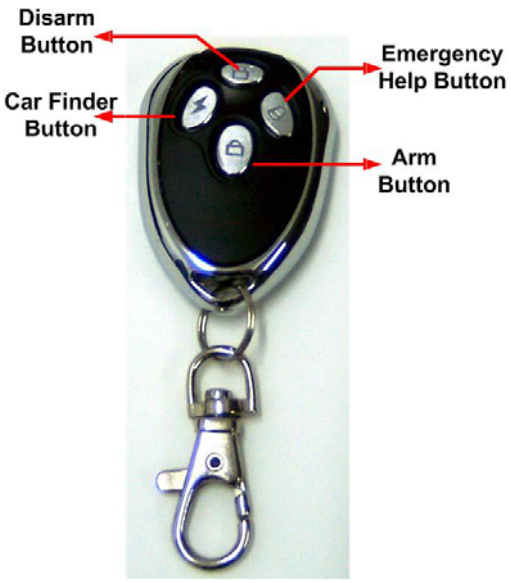
(2) Send the 2nd SMS to the Alarm.

CEN666666#78:N

Note: if the mobile digit's no is a singular, N= Mobile digit's No+1, if the mobile digit's no is a dual, N= Mobile digit's No .

For example, the mobile number (+XXX)08033095801 has 11 digits, so user should send the SMS **CEN666666#78:12** to the alarm phone number.

Transmitters



How to program a new transmitter ?

In DISARMED status, open the car door, then switch the ignition key between ON & OFF positions for at least 7 times. When the main unit's LED turns on, the main unit will send out one sound "DI", it means that the system is in programming status. In the next 10 seconds, please press the any key on the transmitter, if you can hear "Di Di" sounds, it means that the transmitter has been programmed. In the second 10 seconds, you could program the second transmitter with the same process. If there is no any signal from the transmitter in 10 seconds, then the system will automatically quit out programming status, and send out 3 sounds "Di Di Di"

Operation By Telephone

Arm/Disarm by Telephone Calling

User could also use the alarm-received telephone to call the system SIM card number, so as to arm/disarm the system.

Arm: After hearing several ring tones, if the system hangs up the call automatically, and calls you back, it means that the system is armed.

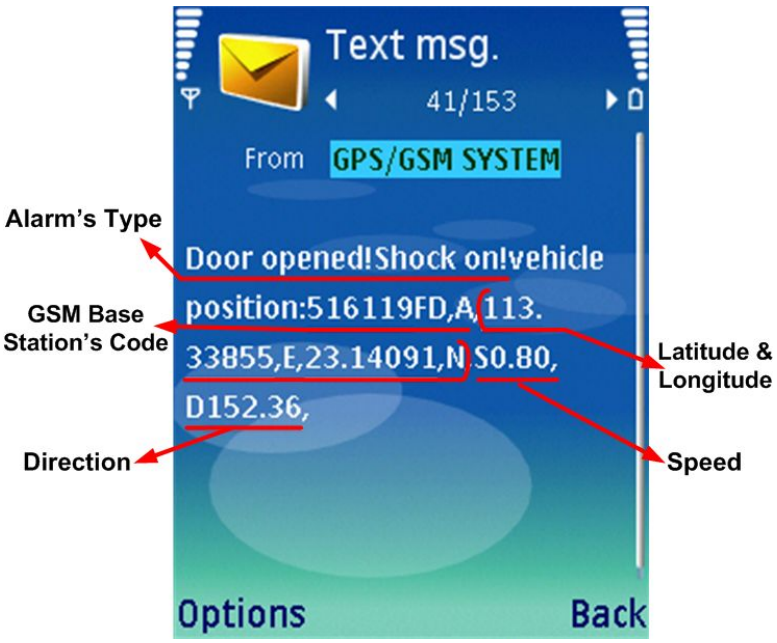
Disarm: After hearing several ring tones, if the system hangs up the call automatically, and don't call back you, it means that the system is disarmed.

(Note: User no needs to pay any communication fee for this operation)

SMS Alarm Message

When the alarm is triggered, it will send the similar SMS message as the following one to the user's mobile. This SMS alarm message includes:

- ✧ **Alarm type**. "Door Opened", "Shock on", "Engine on", "Power supply failed", "Robbed"
- ✧ **Base station's code of GSM networks**. The GSM operator can locate the car's position by this information.
- ✧ **Latitude & longitude.** User could locate the car's precise position by help of GOOGLE EARTH. (Download link: http://earth.google.com/)
- ✧ **Speed**. The car's speed is showed in this message.
- ✧ **Direction**: The car's direction is showed in this message.



***Example**: The above message shows that: the car door is open, the car is shocked. The GSM base station code of the car is 516119FD, the longitude is 113.33855, the latitude is 23.14091, the car's speed is 0.80, the car's direction is 152.36.*

SMS Control Instructions

The format of the instruction is: "user password(111111)+ control code(XXX)"
The default user password is 111111.
XXX is the control code, it could be capital letter or small letter.
There is no space between the user password & the control code.

- **111111PSWnnnnnn**

This instruction is used to change the user password. The length of the user's password is 2~6 digits. Users are suggested to change to the new password in use.

Example: User sends the SMS "111111PSW1234" to the system, and gets the confirmation SMS "111111PSW1234" in 10 seconds. It means that the user password has been changed to 1234 successfully.

111111ARM

This instruction is to arm the system.

The direction lights flash once, the siren sounds once, the system will send back the confirmed SMS to you, such as “Arm Setted! Vehicle position: ……”

- **111111DSM**

This instruction is to disarm the system.

The direction lights flash twice, the siren sounds twice, the system will send back the confirmed SMS to you, such as “Arm unsetted! Vehicle position: ……”

- **111111STP**

This instruction is to cut off the car’s power supply or fuel supply, so as to stop the car.

The car lights will flash, the siren will sound. The car will be controlled to stop gradually.

Attention: It is very dangerous to cut off power when the vehicle is running. We do not take any responsibility to the consequence caused by this action.

- **111111RES**

This instruction is to restore the car to normal status after stopping the car.

- **111111CHK**

This instruction is to inquiry the system status & information.

The system will send back the SMS, includes the similar information as “Arm setted, vehicle position: ……”

- **111111MON***

This instruction is to ask the system to call you back on the call back phone number specified by the * eg if the PIN No. is 111111, sending SMS 111111MON08033095802 will cause the system to call you back on 08033095802 and activate the secret microphone so that you can listen to conversation of people inside the vehicle.

Working Process

The process of arming the system

There are 3 ways to arm the system:

Press the arm button for 0.5 second;

Use the alarm-received mobile to call the system’s SIM card number;

User any mobile to send the SMS control instruction (such as “111111ARM”) to the system’s SIM card number;

Responses:

The direction lights will flash once, the siren will sound once;

The car door will be locked automatically; if the car door is not closed well, the siren & the direction lights will hint for 17 seconds, the system will send SMS to warn that the door is not closed.

If the ignition key is at ON position, the car door can be locked, but the system can not be armed.

If user arms the system by phone call. The system will automatically call back the user's mobile, after several ring tones it will hang up the calling automatically.

The process of disarming the system

There are 3 ways to disarm the system:

Press the disarm button for 0.5 second;

Use the alarm-received mobile to call the system's SIM card number;

User any mobile to send the SMS control instruction (such as "111111DSM") to the system's SIM card number.

Responses:

The direction lights will flash twice, the siren will sound twice;

If the car door is not opened in 45 seconds, the system will consider it as false operation. The system will automatically enter into arming status. If the door is opened during this period, the system will not be re-armed again;

The car door will be unlocked automatically;

While the system is triggered to send out the alarm (except "Robbery alarm" & "Stop the car by force"), the car's direction lights will flash twice, the siren will sound twice, the door is unlocked and the system is disarmed. The user mobile will get the confirmed SMS message.

If the system is triggered by "Robbery alarm" or "Stop the car by force", it can't be disarmed by transmitter, it can only be disarmed by SMS instruction.

The process of triggering the alarm

The following conditions will trigger the system to send out alarm message:

In arming status, the car is shocked;

Car lights flash, siren sounds, the system will send SMS such as "Shock on, vehicle position: …… " to user's mobile;

In arming status, the car door is open;

Car lights flash, siren sounds, the system will send SMS such as "Door Opened, vehicle position: …… " to user's mobile;

In arming status, the engine is started by ignition key;

Car lights flash, siren sounds, the system will send SMS such as "Engine on, vehicle position: …… " to user's mobile;

In arming status, the car's power supply is cut off;

The system will send SMS such as "Engine on, vehicle position: …… " to user's mobile;

At any time, press Emergency Help button on the transmitter for 3 seconds;

Car lights flash 3 times quickly, siren sounds 3 times quickly, the system will send SMS such as " Urgent help , vehicle position: …… " to the alarm-received mobiles;

At any time, press the Anti-robbery Switch for 5 seconds;

Car lights will not flash, siren will not sound, the system will send SMS such as " Be robbed , vehicle position: …… " to the alarm-received mobiles;

The process of finding the car in the parking lot

Press Car Finder button on the transmitter, the direction lights will flash 5 times, the siren will sounds 5 times.

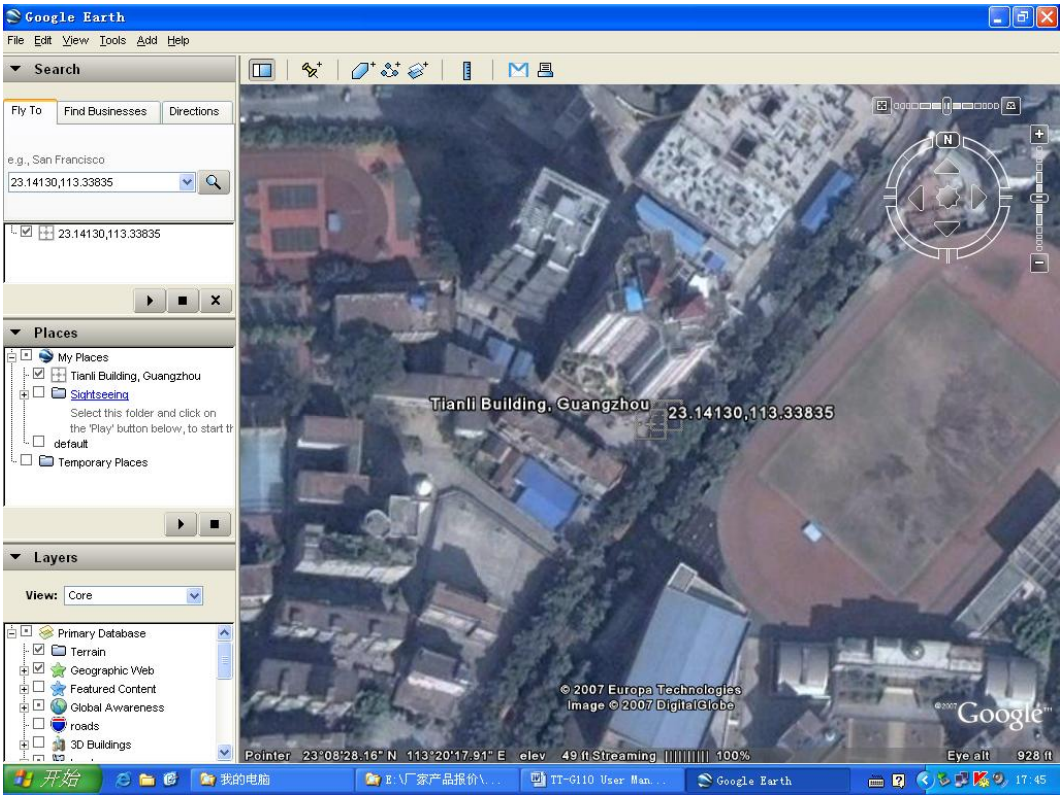
How to Track the Car

Track the Car by SMS

The user could get SMS alarm message from the system, this message includes 2 kinds of location information:

(1) .The code of the GSM network's base station. With the help of your GSM operator, the car could be easily located.

(2). The GPS's latitude & longitude, user could track the car's location after inputting them in the GOOGLE EARTH (please download it from http://earth.google.com)



Specifications

GSM frequencies: 900/1800/1900MHz;
Working voltage: +10~14 VDC
Power Consumption: Idle current:<=50mA, Working current: <= 300mA;
Maximum sending power: 1 W;
RF receiving sensitivity: -102dBm;
Working temperature: -20 ~ 80℃;
Humidity: 0 ~ 95%;
The time from alarm's triggering to receiving: <=10 seconds;
Dimension of main unit: 135.0 x 82.0 x 36.0mm;
Net weight: 0.8kg

FAQ & Troubleshooting

FAQ	Troubleshooting
The mobile can not recieve the alarm informations. The other functions are OK.	(1) The SIM card inside the system has no credit; (2) The SMS instruction is not in correct format; (2) The mailbox of the user's mobile is full;
The transmitter doesn't work or the distance is not long enough	(1) Check the contact of the battery; (2) Replace a new battery;
No GPS signal	(1) Please place the GPS antenna outdoor; (2) Please check the connection of the GPS antenna;
False alarm	(1) Door is not closed tightly (2) The door triggering switch is damaged (3) The button on the transmitter is pressed casually
There is no response while operating transmitter	(1) The system is triggered by "robbery alarm"; (2) The car has been stopped by SMS instruction.

Installation

Packing List

Component name	Quantities
Main unit	1 pc
Transmitters	2 pcs
GPS antenna	1 pc
GSM antenna	1 pc
Emergency Help Switch	1 pc
Shock sensor	1 pc
Cut-off relay	1 pc
Siren	1 pc
Wiring	1 pc

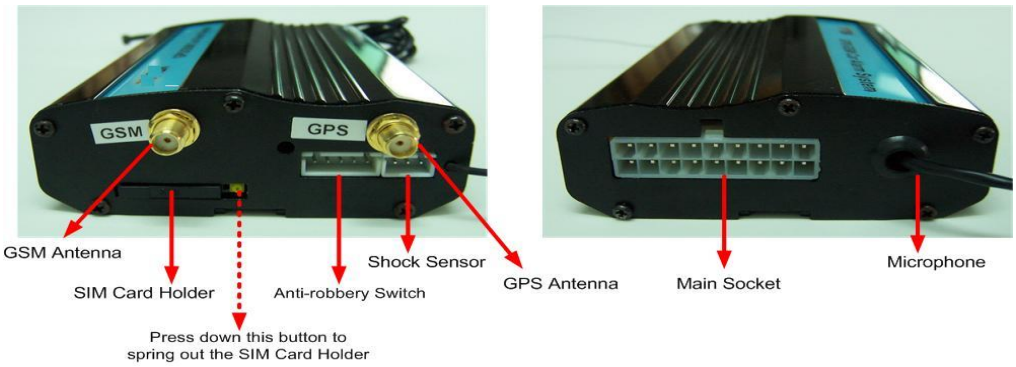
Notice on Mounting the Antennas

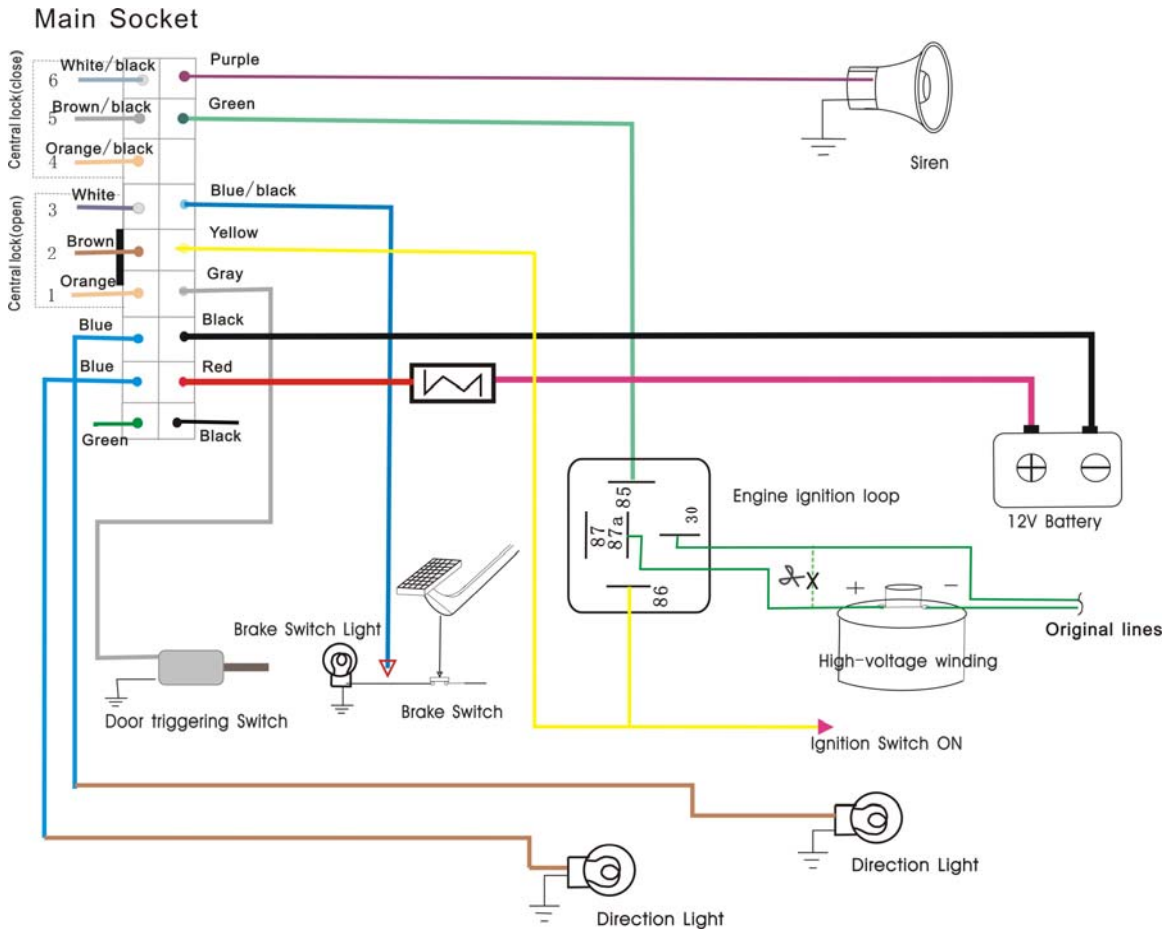
1.While mounting the GPS antenna, the side with sticker must be placed upside to the sky so as to receive the GPS signal very well. There could not be any metal or shielded obstacles around the upside of the GPS antenna, the GPS antenna should be placed at broad place too. It should be drawn straight and kept away from the sound box or speaker

2. While mounting the GSM antenna, it should be placed at broad place where no shielded obstacle is. The GSM antenna can't be placed along with the GPS antenna in parallel. It should be drawn straight and kept away from the sound box or speaker.

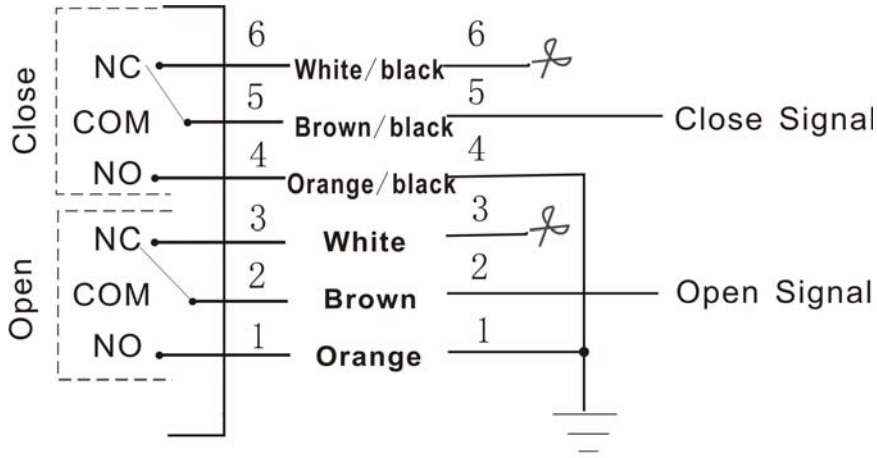
3. Please draw straight the RF antenna on the main unit, so that the transmitter can work at longer distance.

Wiring Diagram

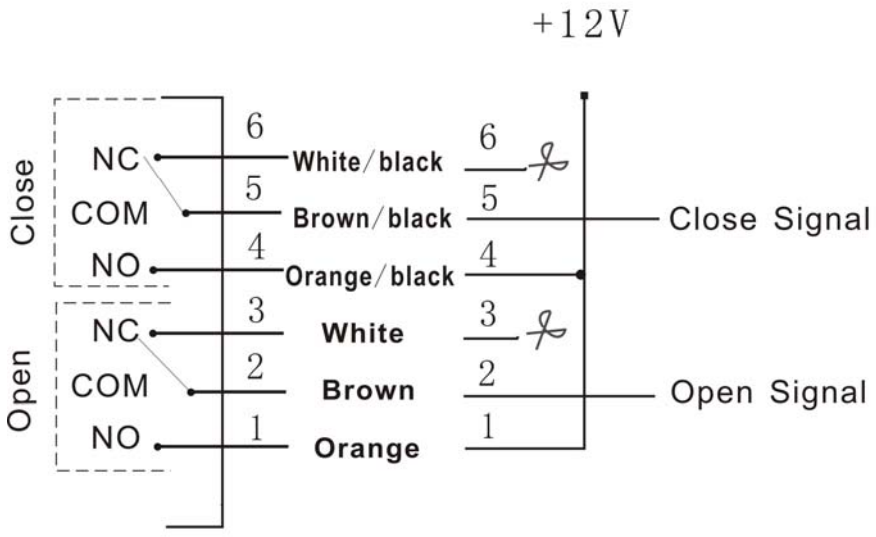




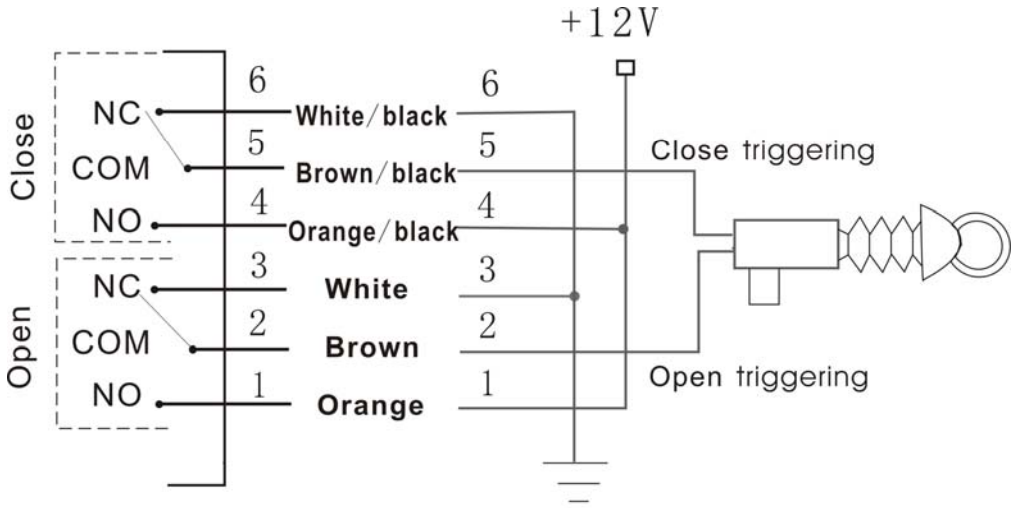
Connection with Central Lock



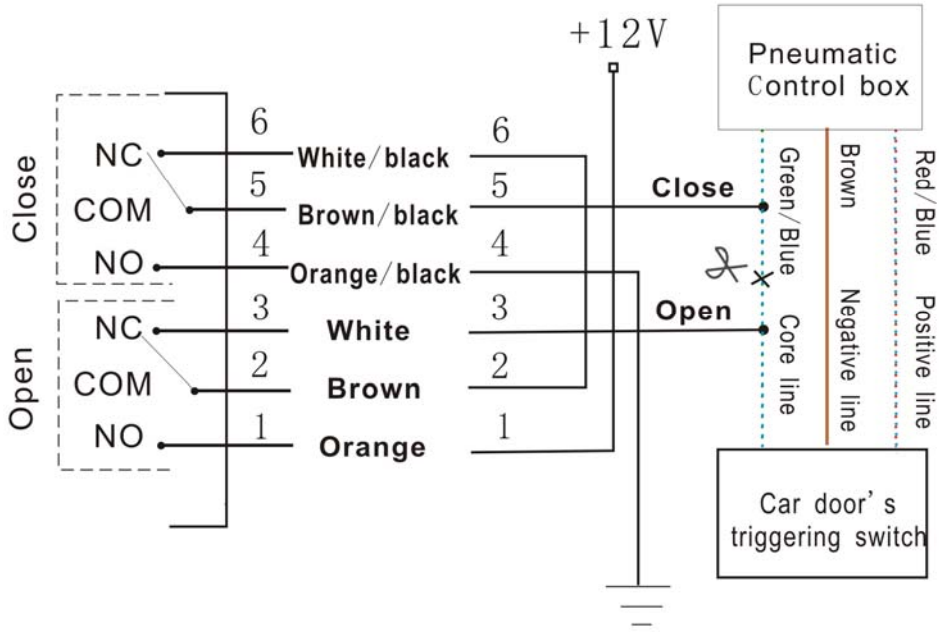
Negative Triggering



Positive Triggering



Positive/Negative Triggering



Pneumatic Lock Triggering